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June 21, 1996

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Washington, D.C. 20554

Mr. David A. Nall  
Commercial Wireless Division  
Federal Communications Commission  
2025 M Street, N.W.  
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JUN 21 1996

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Re: CC Dockets 95-185 ✓  
CC Docket 96-98

Dear Karen and David:

Attached for your review in preparation of our meeting at 2:00 p.m. Thursday, June 27, 1996, on issues in Dockets 95-185 and 96-98 are Paging Network, Inc.'s Comments and Reply Comments in Docket 95-185. You may find it particularly useful to look at Appendix C of our Comments, which sets forth the varying interconnection rates messaging carriers pay to the LECs (despite the fact that in the messaging context the traffic all originates from LEC customers, and should be a LEC, not messaging carrier cost).

You may also wish to review with particularity, Appendices D & E of the Comments, which discuss the appropriate CMRS rate to be charged the LECs for termination of LEC traffic over the messaging carrier's facilities.

Also enclosed for your convenience is a chart which summarizes LEC-CLEC compensation in certain states. In no state

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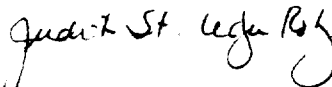
# REED SMITH SHAW & McCLAY

Ms. Karen Brinkmann  
Mr. David A. Nall  
June 21, 1996  
Page 2

are messaging carriers presently receiving termination  
compensation despite the FCC's recognition of entitlement.

Very truly yours,

REED SMITH SHAW & McCLAY

  
Judith St. Ledger-Roty

JSLR:byw

cc: William F. Caton  
w/LEC-CLEC Chart enclosed.

## MUTUAL COMPENSATION LEVELS FOR LEC-CLEC

### Time Warner/BellSouth:

- All 9 states
- \$.01 as long as traffic is in balance +/- 5%

### MCImetro/BellSouth:

- FL \$.011, GA \$.01, TN \$.019, AL \$.01, NC \$.013

### Jones Telecom/Bell Atlantic

- VA
- Tandem: \$.009; End Office: \$.007

### MFS/Ameritech:

- Illinois
- \$.009
- NOTE: This may supercede \$.0075 (Tandem) and \$.005 (End Office) rates set by ICC

### MFS/Pacific Bell:

- California
- Local: \$.0075; Toll: \$.014 (other categories also)
- NOTE: This may supercede interim bill and keep arrangement adopted by PSC

### Various parties in New York:

#### New York Telephone:

- Interconnection at Tandem:
  - Per MOU - day = \$0098
  - Per MOU - evening = \$.0073
  - Per MOU - night = \$.0029
  - Per month/DS1 port = \$950.00
- Interconnection at End Office:
  - Per MOU - day = \$.0074
  - Per MOU - evening = \$.0034
  - Per MOU - night = \$.0027
  - Per month/DS1 port = \$1,710.00

#### Rochester Telephone:

- \$.0221

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Various parties in Massachusetts (pending PSC review):

-- \$.015

Various parties in Washington State:

-- Bill and keep prescribed by PSC on interim basis

**COMMENTS OF PAGING NETWORK, INC. IN CC DOCKET NO. 95-185**

**REPLY COMMENTS OF PAGING NETWORK, INC. IN CC DOCKET NO. 95-185**

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Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
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In the Matter of

Interconnection Between Local  
Exchange Carriers and Commercial  
Mobile Radio Service Providers

CC Docket No. 95-185

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MAR - 4 1996

COMMENTS OF PAGING NETWORK, INC.

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

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March 4, 1996

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JUN 21 1996

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY page

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Summary

Paging Network, Inc. ("PageNet"), hereby submits its comments in response to the Commission's Notice of Proposed Rulemaking ("NPRM") in CC Dockets 95-185 and 94-54. In these comments, PageNet establishes a compelling case for the Commission to: (1) roll back unreasonable LEC pricing practices for CMRS interconnection that still reflect the historical monopoly of the local exchange carriers ("LECs"); and (2) adequately compensate CMRS providers for the LEC's use of CMRS facilities in terminating calls originated on the LEC's network.

Historically, if a paging carrier does not accept interconnection according to the LEC's terms, the paging carrier is denied interconnection or possibly the numbers essential to interconnection. This is so even though there is no question that paging carriers are co-carriers with the LECs. To convert this historical abuse of monopoly power, the Commission must establish new and fundamentally more rational structure for CMRS interconnection and co-carrier termination compensation.

Achieving competition in the promotion of all local exchange services is critical to the public interest. To promote this interest, the Commission should not define competitive services as narrowly as two-way voice services, but must consider the full range of services, like PCS, cellular and paging, that compete

with local exchange services. To that end, the Commission must find that paging carriers are entitled to compensation for the costs they incur in terminating calls received from the LEC, and that LEC interconnection arrangements should not require paging carriers to pay the LEC for originating facilities and functions for which LECs are already fully compensated by their end users.

The bill and keep compensation model proposed by the Commission must not be applied to the paging industry. Bill and keep may be appropriate where there is a current or anticipated balance of traffic; however, bill and keep is inappropriate for paging because traffic flows on paging networks are still totally one-way. If bill and keep is applied without consideration of the one-way traffic characteristics of paging, bill and keep results in a windfall to the LECs (by allowing them to terminate their traffic on paging networks free of charge) and denies paging carriers any compensation for the switching and transport functions that they perform in terminating traffic. If the Commission fails to establish interconnection and compensation standards appropriate to the unique characteristics of paging, it will artificially create competitive advantages for the LECs and the two-way CMRS industry.

The existing interconnection arrangements that have been negotiated between LECs and paging carriers reflect extreme and wholly unjustified variations in pricing for identical

interconnection components. Even a superficial review of the LEC pricing practices makes clear that currently effective paging interconnection arrangements are patently unreasonable, wholly unsupported and unreasonably discriminatory. The Commission simply cannot allow these practices to continue.

In order to promote efficient interconnection, the Commission's CMRS interconnection rules should ensure that all parties receive fair compensation for the network functions they provide, eliminate LEC double and triple recovery of network costs, and reflect fair and efficient co-carrier arrangements. The structure of the LEC/paging carrier interconnection/compensation arrangements must ensure that the LECs do not charge paging carriers for transporting LEC-originated traffic and that the paging carrier is fairly compensated for terminating other carriers' traffic on its network. Therefore, the Commission must adopt a compensation arrangement that ensures that the LEC does not over-recover charges associated with the inter-carrier link between the LEC switch and the paging carrier mobile telephone switching office ("MTSO") and provides for immediate and full compensation to the paging carrier for the call set up, switching and transport functions that it performs.

Many LECs ignore the co-carrier status of paging carriers and treat them as customers of LEC access service. As a result of this practice, LECs collect double -- and in some cases,

triple -- charges for the services they provide. In a typical paging interconnection arrangement the paging carrier is forced to pay the LEC for the transmission segment between the LEC's terminating end office and the paging carrier's MTSO, even though this function is fully paid for by the originating end user. Even more outrageous, several LECs further require the paging carrier to pay both monthly flat rates and per-minute-of-use charges for the same facility, resulting in a "triple dip" by the LEC for the same transmission segment. This pricing not only grossly inflates the cost of paging interconnection, it provides excessive and unjust compensation to the LEC.

For these reasons, the Commission must abandon its proposal to require paging carriers to pay LEC entrance facility charges for the link between the LEC switch and the paging carrier MTSO.

The Commission's policy and goals require the establishment of reasonable interconnection and mutual compensation arrangements for paging carriers. These arrangements require:

- (1) that the LEC may not impose upon paging carriers any charges for the inter-carrier transmission link between the LEC's switch and the paging carrier's MTSO;
- (2) LECs compensate paging carriers for the switching and transport functions that the paging carriers perform in terminating traffic that originates from the LEC network;
- (3) the rate of compensation should be expressed as a charge per call derived from interstate tariffed rates (for example, using access charges from BellSouth's federal

tariff, the rate would be \$.00633 per call); and (4) initial standards for interconnection of LEC and CMRS carrier networks should be fully consistent with the standards established for interconnection with other carriers

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of

Interconnection Between Local  
Exchange Carriers and Commercial  
Mobile Radio Service Providers

CC Docket No. 95-185

To: The Commission

**COMMENTS OF PAGING NETWORK, INC.**

Paging Network, Inc. ("PageNet") by its attorneys and pursuant to 47 C.F.R. §§ 1.145 and 1.149, hereby submits its comments in response to the Commission's Notice of Proposed Rulemaking ("NPRM") in CC Docket No. 95-185. In these comments, PageNet demonstrates a compelling need for the Commission to address the local exchange carrier's ("LEC's") historical monopoly position with respect to LEC to CMRS interconnection. Simultaneously, the Commission should address the CMRS carriers' entitlement to compensation which flows from the LEC's use of CMRS facilities in terminating LEC-originated calls, and set forth the mechanisms whereby rational interconnection and compensation policies are immediately implemented.

**I. GENERAL COMMENTS**

**A. Statement Of Interest and Ability to Contribute to Proceeding**

PageNet is the largest paging carrier in the United States. Created in 1982, PageNet currently provides service to approximately 6.7 million paging units throughout the United States. PageNet offers service in every major market and is in the process of building systems pursuant to its nationwide narrowband PCS authorizations. PageNet has sought, and obtained over time, various forms of interconnection to the Public Switched Telephone Network ("PSTN") for its paging operations in nearly every major population center in the United States. PageNet is currently seeking to revise the terms and conditions of interconnection with its LEC co-carriers, and as such, is aware of the current state of interconnection and compensation as it affects paging carriers. PageNet's experience in the process of interconnection makes PageNet eminently qualified to comment on the issues raised in this proceeding.

**B. The Underlying Rationale -- That Co-Carriers Are Entitled To Peer Interconnection And Compensation Arrangements -- Applies Equally To All CMRS Market Segments, Including Paging.**

**1. Currently Effective LEC To CMRS Interconnection And Compensation Arrangements Are Seriously Flawed.**

Implicit in the NPRM's discussion of co-carrier interconnection is a recognition of fundamental tenets of equity



and economic efficiency, which can be distilled into four basic concepts:

- (1) Compensation arrangements should not artificially distort competition.
- (2) Dominant LECs should not be permitted to continue to stifle competition by refusing to compensate co-carriers for terminating traffic, or by setting termination compensation rates at excessive levels.
- (3) A co-carrier must not be forced to pay another carrier's costs of originating traffic.
- (4) A carrier should be paid for the costs it incurs in terminating calls received from other carriers.<sup>1</sup>

Historically, none of these principles has been reflected in the context of paging interconnection and compensation arrangements. As more fully explained in Section II(A)(1) below, the LECs have used their monopoly position to extract excessive rates for interconnection and to require the paging industry to pay the LECs for facilities whose costs are properly the LECs', not the paging carrier's, to bear. The paging carriers have had virtually no leverage in negotiating for interconnection. If the paging carrier does not ultimately accept the LEC's terms, the paging carrier is denied interconnection or denied telephone

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<sup>1</sup> For purposes of these comments, PageNet is focusing on rate-related issues. Other matters -- including the LECs' ability to impose unreasonable restrictions on interconnection technology, and to unreasonably delay the implementation of interconnection -- are also matters of critical importance to competitors.

numbers essential to interconnection. Sometimes, the paging carrier is denied a combination of the two. This pervasive historical abuse of monopoly power compels the Commission to establish new and fundamentally more rational structures for CMRS interconnection and co-carrier compensation.

**2. As Competitors To Traditional Wireline Local Services, And As Co-Carriers That Terminate Traffic Originating On LEC Networks, Paging Carriers Are Fully Entitled To Compensation.**

The Notice expresses the Commission's concern that its general interconnection policies "may not do enough to encourage the development of CMRS, especially in competition with LEC-provided wireline services." NPRM at ¶2. PageNet concurs with the Commission that achieving competition in the promotion of all local exchange services is critical to furthering the public interest. In order to promote this interest, the Commission should not define competitive services narrowly as two-way voice services, but must consider the full range of services that compete with local exchange services.<sup>2</sup> Like PCS and cellular services, paging services compete with -- as well as provide services ancillary to -- those services offered by traditional

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<sup>2</sup> This range of services includes voice and non-voice, unidirectional and bi-directional services. These services may compete as direct substitutes for local exchange services, or may provide functions that are ancillary to, or complimentary to, such services.

local exchange companies. Indeed, there is growing substitutability among all forms of cellular, PCS, paging and landline services as each of these technologies develop and new service applications arise.

For example, some specific services cut across all carrier types, e.g., practically all carriers are now offering very sophisticated voice-mail services.<sup>3</sup> These voice-mail services are in many instances surrogates for traditional two-way conversations. Similarly, the paging industry provides a range of services that provide numeric and alpha messages, including full text messages of unlimited duration, and facsimile copies of documents. In these applications, the textual message transmitted to a paging subscriber competes with landline services offered by the LECs. The transmission medium is different, but the call may substitute for a call that would otherwise have been placed over the landline network.

People in virtually every type of industry employ pagers to communicate more immediately and efficiently. Doctors and lawyers, plumbers and electricians, sales forces and students -- all use pagers to facilitate communications. The fact that the

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<sup>3</sup> PageNet notes that the development of voice mail as an adjunct to CMRS services has been hindered by excessive interconnection costs imposed by the LECs.

industry has achieved such rapid penetration and that these growth rates are expected to continue is a tribute to the ubiquity, quality and diversity -- and thus value -- of services the paging industry is offering. Indeed, paging is especially important to those who require mobility in communications, but cannot afford the higher cost of two-way broadband services. Despite the very high costs of entry which the LECs have unreasonably imposed on the paging industry, the paging industry has as many units in service as any other mobile service today. By year end 1995, approximately 600 carriers served over 34 million paging units. This compares to 30 million or so cellular units in service as of mid-year 1995. Furthermore, industry estimates suggest that -- if current trends continue -- there will be over 56 million pagers in service by the year 2000.<sup>4</sup> Note, however, that while the industry has been able to grow despite excessive LEC-imposed interconnection rates, continued growth is fundamentally dependent upon the establishment of reasonable interconnection rates and terms, including the establishment of reasonable and nondiscriminatory compensation. As landline carriers and PCS and cellular providers obtain reasonable interconnection arrangements as a result of the

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<sup>4</sup> See *In the Matter of Revision of Part 22 and Part 90 of the Commission's Rules to facilitate Future Development of Paging systems*, Notice of Proposed Rulemaking, WT Docket 96-18 and PP Docket No. 93-253, fn. 19 (released Feb. 9, 1996).

instant proceeding and others like it their service offerings will overlap to an increasing extent with the offerings of paging carriers. If the Commission fails to establish interconnection rules and policies that place paging-only carriers on equal footing with these competitors the projected growth of paging services will be jeopardized.

The wide range of paging service applications also points to the variety of LEC services for which paging companies offer a competitive alternative.<sup>5</sup> Other considerations also compel the establishment of reasonable compensation arrangements. Two overarching principles must govern the Commission's policies:

- Paging carriers are entitled to be compensated for the costs they incur in terminating calls received from the LEC (or any other exchange service provider), and
- LEC interconnection arrangements should not require paging carriers to pay for LEC originating facilities and functions for which LECs are already fully compensated by their end users.

As PageNet discusses below, the LECs have long had a stranglehold on paging carriers' ability to interconnect at reasonable rates, and to be compensated for services they provide. The Commission must take this opportunity to terminate

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<sup>5</sup> As discussed in subsection 4, *infra*, cellular and PCS carriers now also offer paging service, either as part of or as an adjunct to their basic service package.

the ongoing abuse of monopoly power, should establish pro-competitive interconnection and compensation policies in conformance with these principles and should take immediate action to implement these policies.

**3. The Bill And Keep Mechanism, As Applied To Paging, Will Not Compensate Paging Carriers For Their Costs Of Traffic Termination.**

Despite the paging industry's vast and continuing participation in the network of networks, the Commission's NPRM has apparently overlooked a key factor in proposing its bill and keep compensation model for all CMRS providers; that is, bill and keep would not provide any compensation to the paging industry for its costs in terminating LEC-originated calls.<sup>6</sup> PageNet does not oppose the use of bill and keep for other appropriately situated CMRS providers, assuming it does not discriminate against paging carriers. However, the Commission's proposal of a bill and keep arrangement between the LECs and CMRS carriers simply does not work for paging, a major force in mobile communications, because paging carriers do not originate traffic.

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<sup>6</sup> The term "LEC-originated" refers to calls sent by the LEC to the paging carrier. Most of these calls are from the LEC's own customers, but some can be calls passed through the LEC, e.g., calls received by the LEC from an IXC.

As the Commission observes bill and keep may be appropriate where there is a current or anticipated balance of traffic, or where the costs of termination are de minimis. This method of termination compensation, however is inappropriate in the context of paging services because paging today is still almost totally one-way traffic, and for the most part will remain so for the foreseeable future; that is, virtually all calls to pagers originate on the local exchange carrier network. This fact will not change substantially over the short run, even as two-way paging is introduced in the future. If applied without appropriate consideration of the predominantly one-way traffic characteristic of paging carriers, bill and keep results in a windfall to the LEC by allowing the LEC to double- or triple-recover certain transport charges -- and would deny paging carriers compensation for the switching and transport functions that they perform in terminating traffic. PageNet discusses these unreasonable outcomes of a bill and keep arrangement that precludes compensation for paging carriers in more detail *infra*.

**4. Failure To Provide Compensation To All CMRS Providers Will Artificially Distort The CMRS Marketplace, Unreasonably Favoring One Type Of Carrier Over Another.**

PageNet submits that the concepts inherent in this proceeding -- that co-carriers are entitled to compensation for the use of their facilities by an originating carrier -- apply

equally to paging carriers. As set forth below, the NPRM appears to focus exclusively on bi-directional two-way voice traffic in its discussion of CMRS interconnection and does not take into account the one-way data flows that characterize paging traffic.<sup>7</sup> If the Commission fails to establish interconnection and compensation standards appropriate to the unique characteristics of paging, however, it will artificially create competitive advantages for the LECs and the two-way CMRS industry which are unreasonable, and unreasonably discriminatory under Section 202(a) of the Communications Act of 1934. Were the Commission to proceed down this path, it would artificially distort competition and pricing in both the wireless and wireline markets.

In understanding this, it is important to recognize that the distinctions the Commission is attempting to draw between voice and non-voice carriers are illusory. For example, virtually all wireless providers now offer paging services. Even in its nascent state, the PCS industry is providing paging services over its facilities;<sup>8</sup> and cellular and specialized mobile

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<sup>7</sup> PageNet is also beginning its trials of voice paging services this quarter.

<sup>8</sup> PageNet attaches as Appendix A a promotional brochure describing Sprint Spectrum, a new wireless network service that combines paging, cellular, and voice messaging functions. As the brochure makes clear, Sprint identifies paging as one of the central capabilities of the new service.



radio/enhanced specialized mobile radio carriers are also providing paging services over their facilities. Even landline carriers offer a paging-equivalent service. Furthermore, all of these market segments vigorously compete for voice mail customers. Thus, PCS, cellular, and landline carriers are all also paging carriers in direct competition with the messaging and voice mail services offered by carriers such as PageNet.<sup>9</sup>

In this competitive environment, customers choose between and among the services that cellular, PCS, paging and wireline carriers offer, weighing the advantages and disadvantages of each service against the other in choosing to which services they subscribe. The Commission has found these services to be substitutes for one another. In the *Third CMRS Order*, the Commission found evidence that suggested growing substitution between: (1) cellular service and wide-area SMRs, and (2) cellular and paging service.<sup>10</sup> The Commission also found that

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<sup>9</sup> The paging industry is or will shortly begin offering limited two-way, typically non-interactive services. It will take time before these new services achieve significant market penetration, however. While it is impossible to predict how these services will evolve, and what forms of interconnection arrangements they may require, the interconnection and co-carrier compensation arrangements proposed in these comments will meet the needs of the paging industry for the foreseeable future.

<sup>10</sup> *Implementation of Section 3(N) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, Third Report And Order*, GN Docket No. 93-252, 9 FCC Rcd 7988, 8023-24,

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